

AMENDMENTS TO THE CLAIMS

1-23. (canceled)

24. (new) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) a transcript or cDNA sequence that encodes a polypeptide having an amino acid sequence comprising SEQ ID NO:2;

(b) SEQ ID NO:1;

(c) nucleotides 32-1378 of SEQ ID NO:1; and

(d) a nucleotide sequence that is completely complementary to the nucleotide sequence of (a), (b), or (c).

25. (new) An isolated nucleic acid molecule encoding a thymidylate kinase, wherein the nucleotide sequence of said nucleic acid molecule consists of a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence that encodes a polypeptide comprising an amino acid sequence having at least 95% sequence identity to SEQ ID NO:2;

(b) a nucleotide sequence having at least 95% sequence identity to SEQ ID NO:1;

(c) a nucleotide sequence having at least 95% sequence identity to nucleotides 32-1378 of SEQ ID NO:1; and

(d) a nucleotide sequence that is completely complementary to the nucleotide sequence of (a), (b), or (c).

26. (new) An isolated nucleic acid molecule encoding a thymidylate kinase, wherein the nucleotide sequence of said nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of:

(a) a transcript or cDNA sequence that encodes a polypeptide comprising an amino acid sequence having at least 95% sequence identity to SEQ ID NO:2;

- (b) a nucleotide sequence having at least 95% sequence identity to SEQ ID NO:1;
- (c) a nucleotide sequence having at least 95% sequence identity to nucleotides 32-1378 of SEQ ID NO:1; and
- (d) a nucleotide sequence that is completely complementary to the nucleotide sequence of (a), (b), or (c).
27. (new) An isolated nucleic acid molecule having a nucleotide sequence comprising SEQ ID NO:1 or the complement thereof.
28. (new) An isolated nucleic acid molecule having a nucleotide sequence comprising nucleotides 32-1378 of SEQ ID NO:1 or the complement thereof.
29. (new) An isolated transcript or cDNA nucleic acid molecule comprising a nucleotide sequence that encodes a polypeptide comprising SEQ ID NO:2, or the complement of said nucleotide sequence.
30. (new) The isolated nucleic acid molecule of claim 25, further comprising a heterologous nucleotide sequence.
31. (new) The isolated nucleic acid molecule of claim 30, wherein the heterologous nucleotide sequence encodes a heterologous amino acid sequence.
32. (new) A vector comprising the nucleic acid molecule of any one of claims 24-31.
33. (new) An isolated host cell containing the vector of claim 32.
34. (new) A process for producing a polypeptide comprising culturing the host cell of claim 33 under conditions sufficient for the production of said polypeptide, and recovering said polypeptide.

35. (new) The vector of claim 32, wherein said vector is selected from the group consisting of a plasmid, a virus, and a bacteriophage.

36. (new) The vector of claim 32, wherein said nucleic acid molecule is inserted into said vector in proper orientation and correct reading frame such that a polypeptide comprising an amino acid sequence having at least 95% sequence identity to SEQ ID NO:2 is expressed by a cell transformed with said vector.

37. (new) The vector of claim 36, wherein said isolated nucleic acid molecule is operatively linked to a promoter sequence.